

ABSTRACT OF THE DISCLOSURE

The objective of the present invention is to provide a solid oxide fuel cell which has an improved efficiency with a solid electrolyte layer having an improved ionic conductivity, while maintaining the partition wall function; In order to attain this object, the present invention provides a solid oxide fuel cell comprising an air electrode layer, a fuel electrode layer, and a solid electrolyte layer interposed between said air electrode layer and said fuel electrode layer, wherein said solid electrolyte layer comprises a first electrolyte layer which is made of a lanthanide-gallate oxide and has a first ionic transference number and a first total electric conductivity, and a second electrolyte layer which is made of a lanthanide-gallate oxide and has a second ionic transference number smaller than said first ionic transference number and a second total electric conductivity larger than said first total electric conductivity; said air electrode layer is laminated onto one side of said solid electrolyte layer; and said fuel electrode layer is laminated onto the other side of said solid electrolyte layer.

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